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(54) Title: MONOVALENT ANTIBODY FRAGMENTS

(57) Abstract

Monovalent antibody fragments are described, each of which has one or more polymer molecules site–specifically attached through a sulphur atom of a cysteine residue located outside of the variable region domain of the antibody. The polymers include synthetic or naturally occurring polymers such as polyalkylenes, polyalkenylenes, polyoxyalkylenes or polysaccharides. Each fragment may be attached to one or more effector or reporter molecules, and is of use in therapy or diagnostics where it has markedly improved binding and/or pharmacokinetic properties when compared to other antibody fragments which have the same number and type of polymer molecules, but in which the polymer molecules are randomly attached.